

### **REMARKS**

The non-final Office Action mailed October 4, 2005 and references cited therein have been received and reviewed. Applicant notes that claims 40, 44, 47-65 and 73-76 have been allowed. Claims 3, 5-8, 11-20 and 26-29 were objected to as being dependent upon a rejected base claim, but were indicated as being allowable if rewritten in independent form.

Claims 1-4, 21 and 22 have been amended, and new claim 77 has been added by this amendment.

### **THE SECTION 103 REJECTION**

Claims 1, 2, 4, 9, 10, 21-25 and 30-39 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lanouette in view of Kosaka.

Applicant again acknowledges that Lanouette discloses the use of a wire sensor such as a diameter sensor and a material sensor (Abstract; Col. 2, lns. 4-15; Col. 3, lns. 22-26) or a sensor that can read a bar code on a spool of wire (Abstract; Col. 2, lns. 4-15; Col. 4, lns. 28-33; Col. 4, ln. 64 - Col. 5, ln. 31). The Examiner acknowledged that Lanouette does not disclose, teach or suggest placing information on the consumable weld wire itself. Applicant submits that Lanouette also does not disclose, teach or suggest using information that has been placed directly on the consumable welding wire to provide information about and/or control one or more operations of a welder and/or consumable used with the welder.

The Examiner cited Kosaka for teaching the imparting of information on a welding wire. The Examiner asserted that Kosaka teaches that a reference code P1 and P2 are imparted on the welding wire. Applicant disagrees. Reference codes P1 and P2 designate a welding starting point and stopping point on a workpiece W for a robotic welder. (Col. 3, lns. 37-40). Kosaka is absent any teachings regarding the placement of information on the welding wire and/or using such information

on the welding wire to provide information about and/or control one or more operations of a welder and/or consumable used with the welder.

The Examiner asserted that placement of coded information on a consumable welding wire for use in controlling one or more functions of a welder is a mere design choice. Applicant disagrees. None of the prior art discloses a consumable welding wire that includes coded information for use by the welder during the welding process. Because of the nature of the welding wire, information regarding the welding wire was either conducted analytically (i.e., wire sensor) or obtained from a device holding the welding wire (i.e., wire spool). Coded information on the welding wire itself which is used during a welding process to provide information about the welding wire and/or other consumable, and/or used to control one or more operations of a welder is not disclosed, taught or suggested by the art of record.

The Examiner also asserted that a program on the welding wire was obvious from Col 5, lines 57+ of Lanouette. Lanouette discloses that an electric or magnetic field can be applied to the welding wire and by use of the Hall Effect, one or more properties of the wire can be obtained. Lanouette merely teaches a type of wire sensor that can be used to obtain a physical property of the welding wire. The welding wire is not disclosed as including any type of coded information. The wire sensor merely using the Hall Effect to ascertain a physical property of the welding wire.

Applicant submits that amended claim 1, which requires that a magnetic pulse or magnetic code be placed on the welding wire, is patentably distinct from the teachings of Lanouette and Kosaka. Applicant also submits that new claim 77 which is directed to a method of placing a visual marking that does not include a bar code on the welding wire is also patentably distinct from the teachings of Lanouette and Kosaka.

Respectfully submitted,  
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